

A CONTRIBUTION TO THE FLORA OF PALGHAT DISTRICT, KERALA

E. VAJRAVELU, J. JOSEPH* AND V. CHANDRASEKARAN

Botanical Survey of India, Coimbatore

ABSTRACT

This paper presents an account of the floristic composition of Walayar, Malampuzha and Dhoni Reserve Forests, Palghat District, Kerala State. An enumeration of species, genera and families of Angiosperms and Pteridophytes is given.

INTRODUCTION

The area undertaken for the floristic account is constituted by the Walayar, Malampuzha and Dhoni Reserve Forests in Palghat District, Kerala State. The Walayar Reserve Forest lies between $76^{\circ} 48' - 76^{\circ} 50'$ E and $10^{\circ} 48' - 10^{\circ} 52'$ N whereas the Malampuzha and Dhoni Reserve Forests lie between $76^{\circ} 35' - 76^{\circ} 40'$ E and $10^{\circ} 45' - 10^{\circ} 54'$ N. The altitude of the places, where the collections were made, ranges from 60 m to 350 m though the elevation goes up to 1900 m at the top of Palamalai. Three seasonal visits were made to these forests during the months of July 1963 (I visit), October 1963 (II visit) and May and June 1964 (III visit). As a result of these visits a collection of 478 taxa comprising of 342 genera and 100 families of flowering plants and ferns has been made and studied. Much of the collections were made in the forests of Walayar, Malampuzha and Dhoni, though some sporadic collections of plants were also made in and around Olavakkot town and Walayar Dam area. All the specimens collected and studied have been deposited in the Regional Herbarium, Botanical Survey of India, Southern Circle, Coimbatore with necessary field data and accession numbers.

TOPOGRAPHY

Dhoni Reserve Forest, Sappal hill forest and Eliwal blocks constitute "The Chenat Nair Reserve" which is situated on the Southern extremity of the Western Ghats ending at the Palghat Gap; its nearest point is only five miles from Olavakkot Railway Station. The main ridge ranging from 1000 m to 1500 m in elevation runs from East to West and is cut up by numerous lateral spurs. The elevation rises from 100 m at the Reserve boundary to 1900 m at the top of Palamalai. The slopes above

an elevation of 1000 m are clothed with only grasses while the ridges are rocky with very sparse vegetation.

The Walayar Reserve Forest is situated on the Northern side of the Eastern end of Palghat Gap, on and at the foot of Bolampatty hills. The Walayar river which forms almost the State boundary of Madras and Kerala States, runs through the forest. There is hardly any perennial water source in these areas, though there are many swiftly flowing temporary streams and rivulets traversing the forests at many places.

SOIL AND CLIMATE

Though the Bolampatty hills are formed of gneissic origin, the soil in the plains of Walayar forest is sandy loam and clayey humus, whereas on the slopes the soil is gravelly and coarse. In certain places barren rocks are also found. In Dhoni Reserve Forest the soil is more of clayey and gravelly than of sandy type. Rocky substratum is predominant at the slopes of Malampuzha hills and clayey humus is met with in the plains of Malampuzha forest.

The area under study experiences varying climatic conditions due to the considerable differences in the elevation between plains and ghats. The South west monsoon which precipitates the major part of the annual rainfall, bursts usually in the beginning of June. The heaviest downpours are in July and August. The average annual rainfall ranges from 110 cm to 250 cm. The maximum temperature varies from 90° F to 105° F and the minimum temperature varies from 50° F to 70° F.

VEGETATION

The vegetation of these forests is dry deciduous type (Chandrasekharan 1962) in the Walayar plains

*Present address : Botanical Survey of India, Shillong

as well as at the lower elevations and mixed type of vegetation is met with at the higher elevations of Walayar forest and at Dhoni Reserve Forest. In many places Teak and Rosewood plantations have been raised after deforestation. The tree species which are most commonly found in these forests are *Hydnocarpus laurifolia* Sleumer, *Grewia tiliae-folia* Vahl, *Elaeocarpus munroii* Mast., *Schleichera oleosa* Oken, *Holigarna arnottiana* Hook. f., *Semecarpus anacardium* Linn. f., *Dalbergia lanceolaria* Linn. f., *Bauhinia racemosa* Lamk., *Xylia xylocarpa* Taub., *Anogeissus latifolia* Wall. ex Bedd., *Terminalia bellirica* (Gaertn.) Roxb., *T. crenulata* Roth, *Adina cordifolia* Hook. f., *Hymenodictyon excelsum* Wall., *Diospyros sylvatica* Roxb., *Alstonia scholaris* R. Br., *Gmelina arborea* Roxb., *Premna tomentosa* Willd., *Cleidion spiciflorum* Merr., *Ficus racemosa* Linn. etc. The following are the very common shrubs and climbers in the forests: *Helicteres isora* Linn., *Glycosmis pentaphylla* Corr., *Pterolobium hexapetalum* Sant. & Wagh, *Lawsonia inermis* Linn., *Alstonia venenata* R. Br., *Securinea virasa* Pax & Hoffm., *Apama siliquosa* Lamk., *Clerodendrum viscosum* Vent., *C. serratum* Moon, *Loeseneriella obtusifolia* Smith, *Holostemma annulare* Schum., *Cardiospermum halicacabum* Linn., *Abrus precatorius* Linn., *Centrosema pubescens* Benth., *Butea parviflora* Roxb., *Cissampelos pareira* Linn., *Tiliacora acuminata* Miers, *Rhynchosia viscosa* DC., *Wagata spicata* Dalz., *Passiflora foetida* Linn., *Adenia wightiana* Engl., *Mukia maderaspatana* Roem., *Jasminum auriculatum* Vahl, *J. rottlerianum* Wall., *Ichnocarpus frutescens* R. Br., *Ipomoea sepiaria* Roxb. and *Gymnema sylvestre* Schult. *Lantana camara* Linn. var. *aculeata* Moldenke has got in wherever the condition is favourable and it is very prevalent on the hill slopes with the result that it is very difficult to penetrate through the thick bushes of this species.

Species like *Cleome viscosa* Linn., *Portulaca oleracea* Linn., *Polygala bulbophrix* Dunn., *Polycarpaea corymbosa* Lamk., *Naregamia alata* Wt. & Arn., *Hibiscus lobatus* Ktze., *Zamia gibbosa* Span., *Molugo cerviana* Ser., *Dentella repens* Forst., *Coldenia procumbens* Linn., *Trichodesma zeylanicum* R. Br., *Sesamum prostratum* Retz., *Pedaliium murax* Linn., *Crotalaria verrucosa* Linn., *C. pusilla* Heyne, *Desmodium heterophyllum* DC., *D. triflorum* DC., *Glinus lotoides* Linn., *Scoparia dulcis* Linn., *Justicia simplex* D. Don, *Hyptis suaveolens* Poit., *Boerhavia punarnava* Saha & Krishnamurthy, *Euphorbia pros-*

trata Ait., *E. thymifolia* Linn., *E. hirta* Linn., *Pouzolzia auriculata* Wt., *Scilla hyacinthina* Macbr., are the herbaceous plants occurring in these forests. Sedges and grasses are represented by the following common species: *Cyperus aristatus* Rottb., *C. rotundus* Linn., *C. uncinatus* Poir., *Lipocarpa argentea* R. Br., *Scirpus supinus* Linn., *Eragrostis pilosa* Beauv., *Heteropogon contortus* Beauv., *Iseilema antheophoroides* Hack., *Saccharum spontaneum* Linn., *Themeda triandra* Forsk., *Penisetum polystachyon* (Linn.) Schult., *Aristida depressa* Retz., *Chrysopogon aciculatus* Trin., *Cynodon dactylon* Pers., and *Digitaria adscendens* Henr. Species of *Bambusa* and *Dendrocalamus* are growing very densely throughout the forests mostly on the banks of Walayar river; but as they were not flowering during the visits specimens could not be collected.

Neptunia oleracea Lour., *Sphenoclea zeylanica* Gaertn., *Drosera indica* Linn., *Hygrophila auriculata* Heine, *Nymphaea nouchali* Burm. f., *N. stellata* Willd., *Nymphoides cristatum* Retz., *Limnophila indica* Druce, *Ottelia alismoides* Pers., *Eichhornia crassipes* Solms., *Monochoria vaginalis* Presl ex Kunth, *Typha angustata* Bory & Chaub., *Utricularia flexuosa* Vahl, *U. uliginosa* Vahl and *Lemna paucicostata* Heg. are found frequently in and around water sources at Malampuzha, Olavakkot and Walayar Dam area. *Aeginetia indica* Linn. was found growing in abundance in Dhoni R. F. A few of the orchid species which could be collected in these forests are *Acampe praemorsa* Blatter & McCann, *Habenaria digitata* Lindl., *H. plantaginea* Lindl. and *Aerides maculosum* Lindl. Though these forests are not rich in Pteridophytic vegetation, about sixteen species of ferns could be collected and out of which *Cyclosorus extensus* Ching, *Lygodium flexuosum* Sw., *Adiantum caudatum* Linn., *A. philippense* Linn., *Cheilanthes tenuifolia* Sw., *Pteris quadriaurita* Retz., *P. vittata* Linn. and *Pyrrosia adnascens* Ching are common. *Ophioglossum costatum* R. Br. is noticed commonly with other species like *Drosera indica* Linn. and *Utricularia uliginosa* Vahl on the moist slopes of Malampuzha hills. In general, families like Papilionaceae, Euphorbiaceae, Gramineae, Cyperaceae and Rubiaceae are well represented with species ranging from 20 to 40 under each family.

In the enumeration list, for each species frequency, the condition of flowering or fruiting, place of collection, collector's name and collection number

are given. The classification of Bentham and Hooker is followed with delimitation of Hutchinson's classification in splitting up of a few families. The species under each family are arranged in an alphabetical order. Every attempt has been made to bring the nomenclature upto date.

ENUMERATION

RANUNCULACEAE

Naravelia zeylanica DC.

Common, flowering, Walayar forest, *J. Joseph* 17880.

ANNONACEAE

Annona squamosa Linn.

Common, flowering, Walayar forest, *E. Vajravelu* 19062.

Polyalthia cerasoides Hook. f. & Thoms.

Common, flowering, Walayar forest, *J. Joseph* 17059.

MENISPERMACEAE

Cissampelos pareira Linn.

Common, flowering, Erulankadu-Malampuzha Dam, *J. Joseph* 17163.

Cyclea burmanni (DC.) Hook. f. & Thoms.

Common, fruiting, Dhoni R. F., *J. Joseph* 17865.

Tiliacora acuminata Miers

Common, flowering, Dhoni R. F., *J. Joseph* 17806.

Tinospora cordifolia (Willd.) Miers

Very common, fruiting, Olavakkot, *J. Joseph* 17712.

NYMPHAEACEAE

Nymphaea nouchali Burm. f.

Common, flowering, Olavakkot, *J. Joseph* 17790.

N. stellata Willd.

Common, flowering, Olavakkot, *J. Joseph* 17788.

PAPAVERACEAE

Argemone mexicana Linn.

Very common, flowering and fruiting, Walayar forest, *J. Joseph* 17906.

CAPPARIDACEAE

Cleome chelidonii Linn. f.

Common, flowering, Walayar forest, *J. Joseph* 17119.

C. monophylla Linn.

Common, flowering and fruiting, Dhoni R. F., *J. Joseph* 17853.

C. viscosa Linn.

Very common, flowering and fruiting, Walayar forest, *J. Joseph* 17026.

Crataeva religiosa Forst.

Common, fruiting, Dhoni R. F., *J. Joseph* 17171.

BIXACEAE

Hydnocarpus laurifolia (Dennst.) Sleumer

Common, fruiting, Dhoni R. F., *J. Joseph* 17210.

POLYGALACEAE

Polygala bulbothrix Dunn.

Common, flowering, Malampuzha hill slopes, *J. Joseph* 17797.

CARYOPHYLLACEAE

Polycarpaea corymbosa Lamk.

Common, flowering, Malampuzha hill slopes, *J. Joseph* 17800.

Polycarpon prostratum (Forsk.) Aschers & Schweinf.

Common, flowering, Walayar, *J. Joseph* 17915.

PORTULACACEAE

Portulaca oleracea Linn.

Very common, flowering, Malampuzha canal, *E. Vajravelu* 19142.

P. tuberosa Roxb.

Common, flowering, Walayar, *J. Joseph* 17034.

ELATINACEAE

Bergia ammannioides Roxb. ex Roth

Common, flowering and fruiting, Walayar, *J. Joseph* 17919.

MALVACEAE

Abelmoschus moschatus Medic.

Common, flowering and fruiting, Malampuzha, *J. Joseph* 17150.

Azanza lampas (Cav.) Alef.

Common, flowering, Sappal hill-Dhoni R. F., *J. Joseph* 17812.

Hibiscus furcatus Roxb.

Common, flowering and fruiting, Olavakkot, *J. Joseph* 17714.

H. lobatus (Murr.) Ktze.

Common, flowering and fruiting, Sappal hill-Dhoni R. F., *J. Joseph* 17821.

H. setinervis Dunn.

Common, flowering, Sappal hill-Dhoni R. F., *J. Joseph* 17813.

H. surattensis Linn.

Common, flowering, Olavakkot, *J. Joseph* 17702.

H. vitifolius Linn.

Common, flowering, Walayar forest, *J. Joseph* 17035.

Malvastrum coromandelianum Garcke

Common, flowering, Walayar Dam, *J. Joseph* 17096.

Pavonia patens (Andr.) Chiov.

Common, flowering, Walayar Dam, *J. Joseph* 17874.

P. zeylanica Cav.

Common, flowering, Walayar Dam, *J. Joseph* 17067.

Sida acuta Burm. f.

Common, flowering, Olavakkot, *J. Joseph* 17721.

S. cordifolia Linn.

Common, flowering and fruiting, Walayar Dam, *J. Joseph* 17875.

S. veronicaefolia Lamk.

Common, flowering and fruiting, Olavakkot, *J. Joseph* 17760.

Thespesia populnea (Linn.) Soland. ex Corr.

Commonly cultivated, flowering, Olavakkot, *J. Joseph* 17743.

STERCULIACEAE

Helicteres isora Linn.

Abundant, flowering, Erulankadu-Malampuzha Dam, *J. Joseph* 17165.

Pterospermum acerifolium Willd.

Rare, fruiting, Dhoni R. F., *E. Vajravelu* 19086.

Sterculia guttata Roxb.

Common, flowering, Dhoni R. F., *J. Joseph* 17840.

S. urens Roxb.

Common, flowering, Walayar forest, *J. Joseph* 17885.

TILIACEAE

Corchorus trilocularis Linn.

Common, flowering, Walayar Dam, *J. Joseph* 17084.

Grewia disperma Rottl. ex Spr.

Very common, flowering, Sappal hill-Dhoni R. F., *J. Joseph* 17810.

G. tiliacifolia Vahl

Common, fruiting, Malampuzha, *E. Vajravelu* 20024.

ELAEOCARPACEAE

Elaeocarpus munroii Mast.

Common, fruiting, Walayar forest, *E. Vajravelu* 19149.

OXALIDACEAE

Biophytum reinwardtii (Zucc.) Edgw. & Hook. f.

Common, flowering, Malampuzha Dam, *J. Joseph* 17160.

BALSAMINACEAE

Impatiens acaulis Arn.

Very common, flowering, Dhoni R. F., *J. Joseph* 17226.

I. gardneriana Wt.

Common, flowering, Dhoni R. F., *J. Joseph* 17296.

I. kleinii Wt. & Arn.

Common, flowering, Malampuzha, *J. Joseph* 17140.

RUTACEAE

Glycosmis pentaphylla (Retz.) Corr.

Very common, flower buds, Olavakkot, *J. Joseph* 17775.

Hesperethusa crenulata (Roxb.) Roem.

Common, fruiting, Dhoni R. F., *J. Joseph* 17168.

SIMAROUBACEAE

Samadera indica Gaertn.

Common, fruiting, Dhoni R. F., *E. Vajravelu* 19076.

MELIACEAE

Cipadessa baccifera (Roth) Miq.

Common, flowering, Dhoni R. F., *E. Vajravelu* 19078. Fruiting, *J. Joseph* 17201.

Naregamia alata Wt. & Arn.

Very common, flowering and fruiting, Malampuzha, *E. Vajravelu* 19138.

Swietenia mahagoni Linn.

Common, fruiting, Dhoni R. F., *E. Vajravelu* 19089.

CELASTRACEAE

Celastrus paniculata Willd.

Common, fruiting, Walayar forest, *J. Joseph* 17044.

HIPPOCRATEACEAE

Loeseneriella obtusifolia (Roxb.) Smith

Very common, flowering, Walayar forest, *J. Joseph* 17884.

RHAMNACEAE

Zizyphus oenoplia Mill.

Common, flowering, Walayar forest, *J. Joseph* 17025.

Z. xylopyra Willd.

Common, fruiting, Malampuzha, *J. Joseph* 17144.

VITACEAE

Ampelocissus latifolia (Roxb.) Planch.

Common, flowering, Walayar forest, *E. Vajravelu* 19020.

Ampelocissus tomentosa Planch.

Common, flowering, Walayar forest, *J. Joseph* 17042.

Cayratia pedata (Vahl) Gagnep.

Common, flowering, Walayar forest, *J. Joseph* 17030.

C. tenuifolia Gagnep.

Common, flowering, Dhoni R. F., *J. Joseph* 17232.

Cissus discolor Bl.

Common, flowering, Sappal hill-Dhoni R. F., *J. Joseph* 17835.

C. vitiginea Linn.

Very common, flowering, Olavakkot, *J. Joseph* 17701.

LEEACEAE

Leea indica (Burm. f.) Merr.

Common, flowering and fruiting, Olavakkot, *J. Joseph* 17176.

SAPINDACEAE

Allophylus rheedii Radlk.

Common, flowering, Dhoni R. F., *J. Joseph* 17195.

A. serrulatus Radlk.

Common, flowering, Walayar forest, *J. Joseph* 17002.

Cardiospermum halicacabum Linn.

Very common, flowering and fruiting, Walayar forest, *J. Joseph* 17116.

Schleichera oleosa (Lour.) Oken

Common, fruiting, Walayar forest, *E. Vajravelu* 19041.

ANACARDIACEAE

Anacardium occidentale Linn.

Commonly cultivated, flowering and fruiting, Road side-Dhoni R. F., *E. Vajravelu* 19107.

Holigarna arnottiana Hook. f.

Common, fruiting, Dhoni R. F., *E. Vajravelu* 19075.

Lannea coromandelica (Houtt.) Merr.

Common, fruiting, Walayar forest, *E. Vajravelu* 19021.

Semecarpus anacardium Linn. f.

Rare, flowering, Road-side-Dhoni R. F., *E. Vajravelu* 19092.

PAPILIONACEAE

Abrus precatorius Linn.

Very common, flowering and fruiting, Olavakkot, *J. Joseph* 17777.

Alysicarpus bupleurifolius (Linn.) DC.

Very common, flowering and fruiting, Olavakkot, *J. Joseph* 17748.

A. glumaceus (Vahl) DC.

Common, flowering, Walayar forest, *J. Joseph* 17887.

A. vaginalis (Linn.) DC.

Common, fruiting, Olavakkot, *J. Joseph* 17747.

Atylosia scarabaeoides Benth.

Abundant, flowering, Dhoni R. F., *J. Joseph* 17864.

Butea parviflora Roxb.

Common, flowering, Dhoni R. F., *J. Joseph* 17850.
Fruiting, Malampuzha hill slopes, *E. Vajravelu* 19111.

Cajanus cajan (Linn.) Druce

Commonly cultivated, flowering, Walayar, *J. Joseph* 17912.

Canavalia gladiata (Jacq.) DC.

Very common, flowering and fruiting, Olavakkot, *J. Joseph* 17780.

Centrosema pubescens Benth.

Common, introduced but running wild, flowering and fruiting, Dhoni R. F., *J. Joseph* 17802.

Clitoria ternatea Linn.

Very common, flowering, Walayar forest, *J. Joseph* 17061.

Crotalaria heyneana Grah.

Common, flowering, Sappal hill-Dhoni R. F., *J. Joseph* 17836.

C. mucronata Desv.

Common, flowering and fruiting, Malampuzha, *J. Joseph* 17145.

C. mysorensis Roth

Common, flowering and fruiting, Walayar Dam, *J. Joseph* 17081.

C. nana Burm.

Common, fruiting, Olavakkot, *J. Joseph* 17749.

C. pusilla Heyne

Common, flowering and fruiting, Walayar forest, *J. Joseph* 17882.

C. verrucosa Linn.

Common, flowering and fruiting, Dhoni R. F., *J. Joseph* 17167.

Dalbergia lanceolaria Linn. f.

Common, fruiting, Walayar forest, *E. Vajravelu* 19057.

D. sissooides Grah.

Common, flowering, Walayar forest, *J. Joseph* 17891.

Derris scandens (Roxb.) Benth.

Very common, fruiting, Walayar forest, *J. Joseph* 17004.

Desmodium heterophyllum DC.

Very common, flowering and fruiting, Olavakkot, *J. Joseph* 17723, 17732.

D. triangulare (Retz.) Merr. var. **congestum** (Prain) Sant.

Common, flowering and fruiting, Sappal hill-Dhoni R. F., *J. Joseph* 17816.

D. triflorum (Linn.) DC.

Common, flowering and fruiting, Olavakkot, *J. Joseph* 17727.

D. triquetrum (Linn.) DC.

Common, flowering, Sappal hill-Dhoni R. F., *J. Joseph* 17819.

Dolichos falcatus Klein ex Willd.

Common, flowering and fruiting, Olavakkot, *J. Joseph* 17719.

Geissaspis cristata Wt. & Arn.

Common, flowering and fruiting, Olavakkot, *J. Joseph* 17722.

Indigofera colutea (Burm. f.) Merr.

Common, flowering, Walayar Dam, *J. Joseph* 17097.

I. hirsuta Linn.

Common, flowering and fruiting, Olavakkot, *J. Joseph* 17762.

I. uniflora Buch.-Ham.

Common, flowering, Malampuzha, *J. Joseph* 17793.

Mucuna prurita Hook.

Common, flower buds, Dhoni R. F., *J. Joseph* 17851.

Phaseolus trilobus Ait.

Very common, flowering and fruiting, Walayar Dam, *J. Joseph* 17099.

Pongamia pinnata (Linn.) Pierre

Common, fruiting, Walayar forest, *J. Joseph* 17046.

Pseudarthria viscida Wt. & Arn.

Common, flowering, Olavakkot, *J. Joseph* 17764.

Rhynchosia aurea DC.

Very common, flowering, Dhoni R. F., *J. Joseph* 17859.

R. viscosa DC.

Common, flowering and fruiting, Walayar Dam, *J. Joseph* 17867.

Rothia indica (Linn.) Druce

Common, flowering and fruiting, Walayar, *J. Joseph* 17918.

Smithia conferta Sm.

Common, flowering, Olavakkot, *J. Joseph* 17706.

Tephrosia hirta Ham.

Very common, flowering and fruiting, Walayar forest, *J. Joseph* 17013.

T. tinctoria Pers.

Very common, flowering, Dhoni R. F., *J. Joseph* 17847.

Zornia gibbosa Span.

Very abundant, flowering and fruiting, Olavakkot, *J. Joseph* 17759.

CAESALPINIACEAE

Bauhinia racemosa Lamk.

Very common, fruiting, Dhoni R. F., *J. Joseph* 17233.

Cassia auriculata Linn.

Very common, flowering, Walayar Dam, *J. Joseph* 17868.

C. fistula Linn.

Common, flowering, Walayar Dam, *E. Vajravelu* 19072.

C. hirsuta Linn.

Common, flowering, Olavakkot, *J. Joseph* 17733.

C. mimosoides Linn.

Common, flowering, Sappal hill-Dhoni R. F., *J. Joseph* 17833.

C. occidentalis Linn.

Very abundant, flowering, Walayar Dam, *J. Joseph* 17075.

C. tora Linn.

Common, flowering, Olavakkot, *J. Joseph* 17703.

Pterolobium hexapetalum (Roth) Sant. & Wagh

Common, flowering and fruiting, Walayar forest, *J. Joseph* 17047.

Tamarindus indica Linn.

Common, flowering, Walayar forest, *E. Vajravelu* 19058.

Wagatea spicata Dalz.

Very common, flowering, Sappal hill-Dhoni R. F., *J. Joseph* 17842.

MIMOSACEAE

Acacia caesia Willd.

Very common, flowering, Dhoni R. F., *J. Joseph* 17852. Fruiting, Walayar forest, *E. Vajravelu* 19030.

A. chundra (Roxb.) Willd.

Common, flowering and fruiting, Walayar forest, *J. Joseph* 17883.

A. nilotica (Linn.) Del subsp. **indica** (Benth.) Brenan

Very common, flowering, Walayar Dam, *E. Vajravelu* 19061.

A. pennata (Linn.) Willd.

Common, fruiting, Malampuzha, *J. Joseph* 17147.

Albizia odoratissima (Linn. f.) Benth.

Common, flowering, Malampuzha hill slopes, *E. Vajravelu* 19112.

Dichrostachys cinerea (Linn.) Wt. & Arn.

Common, flowering, Walayar forest, *J. Joseph* 17009.

Leucaena leucocephala (Lamk.) de Wit

Common, flowering, Sappal hill-Dhoni R. F., *J. Joseph* 17829.

Mimosa pudica Linn.

Very common, flowering and fruiting, Walayar Dam, *J. Joseph* 17085.

Neptunia prostrata (Lamk.) Baill.

Common, flowering and fruiting, Olavakkot, *J. Joseph* 17785.

Pithecellobium dulce (Roxb.) Benth.

Common, flowering, Walayar forest, *J. Joseph* 17900.

Xylia xylocarpa Taub.

Very abundant, fruiting, Dhoni R. F., *J. Joseph* 17215.

SAXIFRAGACEAE

Vahlia dichotoma (Murr.) Ktze.

Very common, flowering and fruiting, Walayar river bed, *E. Vajravelu* 19074.

DROSERACEAE

Drosera indica Linn.

Abundant, flowering, Malampuzha, *E. Vajravelu* 19129.

COMBRETACEAE

Anogeissus latifolia (DC.) Wall. ex Bedd.

Common, fruiting, Sappal hill-Dhoni R. F., *J. Joseph* 17815.

Calycopteris floribunda (Roxb.) Lamk.

Common, flowering, Malampuzha Dam, *E. Vajravelu* 19125.

Combretum ovalifolium Roxb.

Common, flowering Walayar forest, *J. Joseph* 17889.

Terminalia bellirica (Gaertn.) Roxb.

Very common, fruiting, Malampuzha hill slopes, *E. Vajravelu* 19115.

T. crenulata Roth

Common, flowering and fruiting, Dhoni R. F., *J. Joseph* 17181.

T. paniculata Roth

Common, flowering, Walayar forest, *J. Joseph* 17893.

MYRTACEAE

Syzygium cumini (Linn.) Skeels

Common, fruiting, Dhoni R. F., *E. Vajravelu* 19106.

S. hemisphericum (Walp.) Alston

Rare, fruiting, Dhoni R. F., *E. Vajravelu* 19074.

LYTHRACEAE

Ammannia baccifera Linn. var. **aegyptiaca** Koeh.

Common, flowering, Walayar Dam, *J. Joseph* 17083.

Lagerstroemia speciosa (Linn.) Pers.

Common, flowering and fruiting, Dhoni R. F., *E. Vajravelu* 19105.

Lawsonia inermis Linn.

Very common, flowering, Olavakkot, *J. Joseph* 17736.

Rotala baccifera (Linn.) Koeh.

Common, flowering, Walayar, *J. Joseph* 17920.

R. leptopetala Koeh.

Common, flowering, Olavakkot, *J. Joseph* 17709.

ONAGRACEAE

Ludwigia hyssopifolia (G. Don) Exell

Common, flowering and fruiting, Olavakkot, *J. Joseph* 17730.

L. octovalvis (Jacq.) Raven

Common, flowering, Walayar forest, *J. Joseph* 17903.

L. perennis Linn.

Common, flowering and fruiting, Malampuzha canal, *E. Vajravelu* 19133.

SAMYDACEAE

Casearia elliptica Willd.

Common, flowering, Malampuzha, *E. Vajravelu* 19116. Fruiting, Olavakkot, 19147.

PASSIFLORACEAE

Adenia wightiana (Wall. ex Wt. & Arn.) Engl.

Common, fruiting, Malampuzha, *J. Joseph* 17136.

Passiflora foetida Linn.

Common, flowering, Walayar, *J. Joseph* 17063. Fruiting, Malampuzha, *E. Vajravelu* 19136.

CUCURBITACEAE

Citrullus lanatus (Thunb.) Mans.

Common, flowering, Walayar forest, *E. Vajravelu* 19056.

Coccinia grandis (Linn.) Voigt.

Very common, flowering, Olavakkot, *E. Vajravelu* 19148.

Cucumis callosus (Rottl.) Cogn.

Common, flowering and fruiting, Walayar Dam, *J. Joseph* 17079.

Mukia maderaspatana (Linn.) Roem.

Common, flowering and fruiting, Olavakkot, *J. Joseph* 17776.

Trichosanthes bracteata (Lamk.) Voigt.

Common, flowering, Malampuzha, *E. Vajravelu* 19117.

MOLLUGINACEAE

Glinus lotoides Linn.

Common, flowering and fruiting, Walayar forest, *J. Joseph* 17123.

G. oppositifolius (Linn.) DC.

Common, flowering and fruiting, Walayar forest, *J. Joseph* 17117.

Mollugo cerviana (Linn.) Ser.

Very common, flowering, Walayar, *J. Joseph* 17039.

M. pentaphylla Linn.

Common, flowering, Walayar forest, *J. Joseph* 17037.

Trianthema portulacastrum Linn.

Very common, flowering and fruiting, Walayar Dam, *J. Joseph* 17080.

UMBELLIFERAE

Centella asiatica (Linn.) Urban

Common, flowering, Malampuzha canal, *E. Vajravelu* 19121.

Pimpinella heyneana Wall.

Common, flowering, Sappal hill-Dhoni R. F., *J. Joseph* 17828.

ALANGIACEAE

Alangium salvifolium Wang.

Common, flowering Walayar, *J. Joseph* 17911. Fruiting, *E. Vajravelu* 19018.

RUBIACEAE

Adina cordifolia (Roxb.) Hook. f. ex Brandis

Common, flowering, Walayar forest, *J. Joseph* 17048.

Argostemma courtallense Arn.

Common, flowering, Dhoni R. F., *J. Joseph* 17203.

Borreria articularis (Linn. f.) F. N. Will.

Very common, flowering and fruiting, Walayar Dam, *J. Joseph* 17871.

B. stricta (Linn. f.) Schum.

Common, flowering and fruiting, Malampuzha hills, *J. Joseph* 17794.

Chasalia ophioxyloides (Roxb.) Craib

Very common, flowering and fruiting, Dhoni R. F., *J. Joseph* 17182.

Dentella repens (Linn.) Forst.

Very common, flowering and fruiting, Walayar canal, *E. Vajravelu* 19063.

Hymenodictyon excelsum (Roxb.) Wall.

Common, flower buds, Walayar forest, *J. Joseph* 17031.

H. obovatum Wall.

Common, flower buds, Dhoni R. F., *J. Joseph* 17228.

Ixora coccinea Linn.

Common, flowering, Olavakkot, *J. Joseph* 17770.

Knoxia mollis Wt. & Arn.

Common, flowering, Erulankadu-Malampuzha Dam, *J. Joseph* 17164.

Mitragyna parvifolia (Roxb.) Korth.

Common, flowering, Walayar forest, *E. Vajravelu* 19022.

Morinda tinctoria Roxb.

Common, flowering and fruiting, Olavakkot, *J. Joseph* 17750.

Mussaenda glabrata (Hook. f.) Hutchin.

Common, flowering and fruiting, Dhoni R. F., *J. Joseph* 17170.

M. laxa Hutchin.

Common, flowering, Malampuzha, *J. Joseph* 17143.

Oldenlandia herbacea (Linn.) Roxb.

Very common, flowering and fruiting, Dhoni R. F., *J. Joseph* 17172.

O. nitida Gamble

Common, flowering, Dhoni R. F., *E. Vajravelu* 19084.

O. umbellata Linn.

Common, flowering and fruiting, Walayar forest, *J. Joseph* 17036.

Pavetta crassicaulis Brem.

Common, flowering, Walayar canal, *E. Vajravelu* 19070.

P. indica Linn. var. **tomentosa** Hook. f.

Common, flowering, Walayar forest, *J. Joseph* 17060. Fruiting, Malampuzha, 17146.

Xeromphis spinosa (Thunb.) Keay

Very common, flowering, Walayar forest, *E. Vajravelu* 19032, 17217.

COMPOSITAE

Acanthospermum hispidum DC.

Abundant, flowering and fruiting, Walayar Dam, *J. Joseph* 17070.

Artemisia nilagirica (Cl.) Pamp.

Common, flower buds, Sappal hill-Dhoni R. F., *J. Joseph* 17831.

Blumea virens DC.

Very common, flowering, Dhoni R. F., *E. Vajravelu* 19100.

Cosmos sulphureus Cav.

Common, flowering and fruiting, Sappal hill-Dhoni R. F., *J. Joseph* 17837.

Eclipta prostrata (Linn.) Linn.

Common, flowering, Walayar Dam, *J. Joseph* 17071.

Grangea maderaspatana (Linn.) Poir.

Very common, flowering, Walayar forest, *J. Joseph* 17122.

Lagascea mollis Cav.

Very common, flowering, Walayar Dam, *J. Joseph* 17086.

Sphaeranthus indicus Linn.

Very common, flowering, Walayar forest, *J. Joseph* 17901.

Synedrella nodiflora (Linn.) Gaertn.

Common, flowering, Dhoni R. F., *J. Joseph* 17191.

Tridax procumbens Linn.

Very common, flowering, Walayar Dam, *J. Joseph* 17098.

Vernonia cinerea (Linn.) Less.

Common, flowering, Walayar forest, *J. Joseph* 17115.

Vicoa indica (Willd.) DC.

Common, flowering, Olavakkot, *J. Joseph* 17726.

Xanthium strumarium Linn.

Abundant, flowering and fruiting, Walayar Dam, *J. Joseph* 17093.

LOBELIACEAE

Lobelia alsinoides Lamk.

Common, flowering, Olavakkot, *J. Joseph* 17705.

CAMPANULACEAE

Sphenoclea zeylanica Gaertn.

Very common, flowering, Walayar forest, *J. Joseph* 17905.

PLUMBAGINACEAE

Plumbago zeylanica Linn.

Common, flowering and fruiting, Dhoni R. F., *J. Joseph* 17857.

MYRSINACEAE

Embelia tsjeriam-cottam DC.

Common, flowering, Walayar forest, *J. Joseph* 17056.

EBENACEAE

Diospyros sylvatica Roxb.

Common, fruiting, Dhoni R. F., *E. Vajravelu* 19104.

OLEACEAE

Jasminum auriculatum Vahl

Common, flowering, Walayar forest, *J. Joseph* 17113.

J. flexile Vahl

Common, flowering, Dhoni R. F., *J. Joseph* 17805.

J. rottlerianum Wall.

Common, fruiting, Dhoni R. F., *J. Joseph* 17175.

Olea dioica Roxb.

Common, flowering, Dhoni R. F., *J. Joseph* 17183.

APOCYNACEAE

Alstonia scholaris (Linn.) R. Br.

Common, flowering, Olavakkot, *J. Joseph* 17795.

A. venenata R. Br.

Very abundant, flowering, Walayar forest, *J. Joseph* 17054.

Catharanthus pusillus (Murr.) G. Don

Common, flowering and fruiting, Walayar forest, *J. Joseph* 17007.

C. roseus (Linn.) G. Don

Common, flowering and fruiting, Walayar, *J. Joseph* 17866.

Ichnocarpus frutescens R. Br.

Very common, flowering, Malampuzha, *J. Joseph* 17148.

Plumeria rubra forma **acuminata** Sant. & Irani ex Shah

Common, flowering, Olavakkot, *J. Joseph* 17789.

Rauvolfia serpentina (Linn.) Benth. ex Ktze.

Not common, flowering and fruiting, Walayar forest, *J. Joseph* 17038.

Thevetia peruviana (Pers.) Schum.

Very abundant, flowering and fruiting, Walayar canal, *E. Vajravelu* 19065.

Wrightia tinctoria R. Br.

Common, fruiting, Walayar forest, *J. Joseph* 17010.

ASCLEPIADACEAE

Calotropis gigantea (Linn.) R. Br.

Abundant, flowering and fruiting, Walayar Dam, *E. Vajravelu* 19059.

Caralluma campanulata N. E. Br.

Common, flowering and fruiting, Walayar forest, *J. Joseph* 17052.

Ceropegia tuberosa Roxb.

Common, flowering and fruiting, Olavakkot, *J. Joseph* 17753.

Cryptolepis buchanani Roem. & Schult.

Common, flowering, Walayar forest, *J. Joseph* 17064. Fruiting, Sappal hill-Dhoni R. F., 17841.

Dregea volubilis (Linn. f.) Benth. ex Hook. f.
Common, flowering, Walayar forest, *J. Joseph* 17058.

Gymnema sylvestre (Retz.) Schult.
Very common, flowering, Walayar forest, *J. Joseph* 17006.

Hemidesmus indicus (Linn.) Schult.
Common, flowering, Dhoni R. F., *J. Joseph* 17804.

Holostemma annulare (Roxb.) Schum.
Common, flowering, Olavakkot, *J. Joseph* 17767.

Pergularia daemia (Forsk.) Blatt. & McC.
Common, flowering, Walayar forest, *E. Vajravelu* 19036.

Toxocarpus kleinii Wt. & Arn.
Common, flowering, Dhoni R. F., *J. Joseph* 17212.

Tylophora tenuis Bl.
Common, flowering, Dhoni R. F., *E. Vajravelu* 19085.

LOGANIACEAE

Strychnos nux-vomica Linn.
Not common, flowering, Olavakkot, *E. Vajravelu* 19150. Fruiting, *J. Joseph* 17755.

S. potatorum Linn. f.
Common, fruiting, Walayar forest, *E. Vajravelu* 19044.

GENTIANACEAE

Canscora decurrens Dalz.
Common, flowering, Sappal hill-Dhoni R. F., *J. Joseph* 17811.

Exacum pedunculatum Linn.
Common, flowering, Walayar Dam, *J. Joseph* 17869.

Hoppea fastigiata Cl.
Common, flowering, Dhoni R. F., *J. Joseph* 17858.

Nymphoides cristatum (Roxb.) Ktze.
Common, flowering, Olavakkot, *J. Joseph* 17787.

BORAGINACEAE

Coldenia procumbens Linn.
Very abundant, flowering and fruiting, Walayar forest, *J. Joseph* 17120.

Heliotropium indicum Linn.
Common, flowering and fruiting, Walayar forest, *J. Joseph* 17126.

H. scabrum Retz.
Common, flowering, Walayar forest, *J. Joseph* 17008.

Trichodesma indicum (Linn.) Lehm.
Common, flowering and fruiting, Walayar Dam, *J. Joseph* 17082.

T. zeylanicum (Brum. f.) R. Br.
Very common, flowering and fruiting, Walayar Dam, *J. Joseph* 17088.

CONVOLVULACEAE

Hewittia sublobata (Linn. f.) Ktze.
Common, flowering, Dhoni R. F., *J. Joseph* 17807.

Ipomoea asarifolia (Desv.) Roem. & Schult.
Common, flowering, Olavakkot, *E. Vajravelu* 19144.

I. cairica (Linn.) Sweet
Common, flowering, Olavakkot, *J. Joseph* 17791.

I. hederifolia Linn.
Common, flowering, Olavakkot, *J. Joseph* 17781.

I. pes-tigridis Linn.
Common, flowering, Walayar Dam, *J. Joseph* 17074.

I. quamoclit Linn.
Common, flowering, Olavakkot, *J. Joseph* 17769.

I. sepiaria Roxb.
Common, flowering, Walayar Dam, *J. Joseph* 17073.

Merremia tridentata (Linn.) Hall. f.
Very common, flowering and fruiting, Olavakkot, *J. Joseph* 17758.

Volvulopsis nummularius (Linn.) Roberty
Common, flowering and fruiting, Olavakkot, *J. Joseph* 17728.

SOLANACEAE

Datura metel Linn.
Very common, flowering, Olavakkot, *J. Joseph* 17711.

Physalis minima Linn.
Common, flowering and fruiting, Dhoni R. F., *J. Joseph* 17225.

Solanum incanum Linn.
Common, flowering and fruiting, Walayar Dam, *E. Vajravelu* 19017.

S. surattense Burm. f.
Common, flowering and fruiting, Walayar river bed, *E. Vajravelu* 19016.

S. torvum Sw.
Common, flowering and fruiting, Walayar forest, *E. Vajravelu* 19029.

SCROPHULARIACEAE

Dopatrium juncum (Roxb.) Buch.-Ham.
Common, flowering, Malampuzha canal, *E. Vajravelu* 19140.

Limnophila indica (Linn.) Druce
Common, flowering and fruiting, Olavakkot, *J. Joseph* 17779.

Lindernia anagallis (Burm.) Pennell

Common, flowering and fruiting, Walayar forest, *J. Joseph* 17127.

L. ciliata (Colsm.) Pennell

Common, flowering and fruiting, Sappal hill-Dhoni R. F., *J. Joseph* 17817.

L. hyssopioides (Linn.) Haines

Common, flowering, Olavakkot, *J. Joseph* 17724.

Rhamphicarpa longiflora (Arn.) Benth.

Common, flowering, Malampuzha, *J. Joseph* 17131.

Scoparia dulcis Linn.

Very common, flowering and fruiting, Walayar, *J. Joseph* 17110.

Sopubia delphinifolia G. Don

Common, flowering and fruiting, Olavakkot, *J. Joseph* 17757.

Striga angustifolia (Don) Saldanha

Common, flowering and fruiting, Olavakkot, *J. Joseph* 17763.

Torenia bicolor Dalz.

Common, flowering and fruiting, Dhoni R. F., *J. Joseph* 17855.

OROBANCHACEAE

Aeginetia indica Linn.

Very abundant, flowering and fruiting, Dhoni R. F., *J. Joseph* 17192.

LENTIBULARIACEAE

Utricularia aurea Lour.

Common, flowering and fruiting, Olavakkot, *J. Joseph* 17766.

U. uliginosa Vahl

Very common, flowering and fruiting, Malampuzha hill slopes, *E. Vajravelu* 19132.

GESNERIACEAE

Didymocarpus rottlerianum Wall. ex R. Br.

Common, flowering and fruiting, Dhoni R. F., *J. Joseph* 17220.

D. tomentosa Wt.

Common, flowering, Walayar forest, *J. Joseph* 17049.

Rhynchoglossum notonianum (Wall.) Burt

Common, flowering, Sappal hill-Dhoni R. F., *J. Joseph* 17838.

BIGNONIACEAE

Dolichandrone arcuata Cl.

Common, flowering, Walayar forest, *J. Joseph* 17910.

Oroxylum indicum (Linn.) Vent.

Common, flowering, Dhoni R. F., *J. Joseph* 17208.

Stereospermum tetragonum DC.

Common, flowering and fruiting, Walayar forest, *E. Vajravelu* 19040.

Tecoma stans (Linn.) H. B. K.

Common, flowering, Walayar forest, *J. Joseph* 17890.

PEDALIACEAE

Pedaliium murex Linn.

Common, flowering and fruiting, Walayar Dam, *J. Joseph* 17870.

Sesamum indicum Linn.

Commonly cultivated, flowering and fruiting, Dhoni R. F., *J. Joseph* 17856.

S. orientalis Linn. var. **malabarica** Nar.

Common, flowering, Walayar forest, *J. Joseph* 17011.

S. prostratum Retz.

Very abundant, flowering and fruiting, Malampuzha hill slopes, *J. Joseph* 17792.

MARTYNIACEAE

Martynia annua Linn.

Common, flowering, Walayar forest, *J. Joseph* 17043.

ACANTHACEAE

Adhatoda vasica Nees

Common, flowering, Olavakkot, *J. Joseph* 17744.

Andrographis echioides (Linn.) Nees

Common, flowering and fruiting, Walayar forest, *J. Joseph* 17907.

Asystasia dalzelliana Sant.

Common, flowering, Dhoni R. F., *J. Joseph* 17178.

A. gangetica (Linn.) T. And.

Common, flowering and fruiting, Walayar Dam, *J. Joseph* 17873.

Barleria buxifolia Linn.

Common, flowering and fruiting, Walayar Dam, *J. Joseph* 17872.

B. cristata Linn.

Common, flowering and fruiting, Walayar forest, *J. Joseph* 17909.

Blepharis madraspatensis (Linn.) Heyne ex Roth

Common, flowering, Olavakkot, *J. Joseph* 17737.

Dipteracanthus prostratus (Poir.) Nees

Common, flowering, Olavakkot, *J. Joseph* 17778.

Hygrophila auriculata (Schum.) Heine

Common, flowering, Olavakkot, *J. Joseph* 17708.

Justicia diffusa Willd.

Common, flowering and fruiting, Dhoni R. F., *E. Vajravelu* 19083.

Justicia simplex D. Don

Common, flowering and fruiting, Malampuzha, *E. Vajravelu* 19130.

J. trinervia Vahl

Common, flowering, Walayar forest, *E. Vajravelu* 19035.

Nilgirianthus barbatus (Nees) Brem.

Common, flowering, Dhoni R. F., *J. Joseph* 17803.

Phaulopsis dorsiflora (Retz.) Sant.

Common, flowering, Walayar forest, *J. Joseph* 17888.

Rungia pectinata (Linn.) Nees

Very common, flowering, Walayar forest, *E. Vajravelu* 19053.

VERBENACEAE

Callicarpa tomentosa (Linn.) Murray

Common, flowering and fruiting, Dhoni R. F., *E. Vajravelu* 19108.

Clerodendrum indicum (Linn.) Ktze.

Common, flowering, Olavakkot, *E. Vajravelu* 19145.

C. serratum (Linn.) Moon

Common, flowering, Dhoni R. F., *J. Joseph* 17229.

C. viscosum Vent.

Common, flowering, Dhoni R. F., *J. Joseph* 17187.

Gmelina arborea Roxb.

Common, fruiting, Malampuzha, *E. Vajravelu* 19113.

Lantana camara Linn. var. **aculeata** (Linn.) Moldenke

Very common, flowering, Olavakkot, *J. Joseph* 17735.

Phyla nodiflora (Linn.) Greene

Very common, flowering and fruiting, Walayar Dam, *J. Joseph* 17078.

Premna tomentosa Willd.

Common, flowering and fruiting, Malampuzha, *E. Vajravelu* 19114.

Stachytarpheta indica Vahl var. **jamaicensis** Trim.

Common, flowering, Walayar forest, *J. Joseph* 17033.

S. mutabilis Vahl

Common, flowering, Olavakkot, *J. Joseph* 17731.

Vitex altissima Linn. f.

Common, fruiting, Malampuzha, *J. Joseph* 17138.

V. negundo Linn.

Very common, flowering, Walayar Dam, *J. Joseph* 17107.

LABIATAE

Acrocephalus indicus (Burm. f.) Ktze.

Common, flowering, Olavakkot, *J. Joseph* 17745.

Anisochilus scaber Benth.

Common, flowering, Sappal hill-Dhoni R. F., *J. Joseph* 17822.

Anisomeles malabarica R. Br.

Common, flowering, Walayar canal, *E. Vajravelu* 19064.

Hyptis suaveolens (Linn.) Poit.

Very common, flowering and fruiting, Walayar forest, *J. Joseph* 17012.

Leonotis nepetaefolia R. Br.

Common, flowering, Walayar forest, *J. Joseph* 17881.

Leucas aspera Spr.

Very common, flowering, Walayar Dam, *J. Joseph* 17089.

L. lavandulaefolia Rees

Common, flowering, Dhoni R. F., *E. Vajravelu* 19094.

L. linifolia Spr. var. **decipiens** Hook. f.

Common, flowering, Malampuzha canal, *E. Vajravelu* 19122.

Ocimum adscendens Willd.

Common, flowering, Walayar Dam, *J. Joseph* 17068.

O. americanum Linn.

Common, flowering and fruiting, Walayar Dam, *J. Joseph* 17072.

O. gratissimum Linn.

Common, flowering and fruiting, Olavakkot, *J. Joseph* 17765.

O. sanctum Linn.

Common, flowering, Walayar Dam, *J. Joseph* 17090.

NYCTAGINACEAE

Boerhavia diffusa Linn.

Very common, flowering and fruiting, Sappal hill-Dhoni R. F., *J. Joseph* 17832.

B. punarnava Saha & Krishnamurthy

Very common, flowering and fruiting, Walayar forest, *J. Joseph* 17014.

AMARANTHACEAE

Achyranthes aspera Linn.

Common, flowering, Walayar forest, *E. Vajravelu* 19039.

Aerva lanata (Linn.) Juss.

Common, flowering, Walayar Dam, *J. Joseph* 17069.

A. monsoniae (Linn. f.) Mart.

Common, flowering, Walayar forest, *J. Joseph* 17894.

Allmania nodiflora R. Br. var. **dichotoma** Hook. f.
Common, flowering, Walayar forest, *J. Joseph* 17051.

Alternanthera sessilis (Linn.) DC.
Common, flowering, Dhoni R. F., *J. Joseph* 17863.
Amaranthus viridis Linn.

Common, flowering and fruiting, Walayar Dam, *J. Joseph* 17066.

Celosia argentea Linn.
Common, flowering, Olavakkot, *J. Joseph* 17768.

Digera muricata (Linn.) Mart.
Common, flowering and fruiting, Walayar Dam, *J. Joseph* 17077.

Gomphrena celosioides Mart.
Common, flowering, Walayar Dam, *J. Joseph* 17094.

Pupalia atropurpurea Moq.
Common, flowering and fruiting, Dhoni R. F., *J. Joseph* 17848.

POLYGONACEAE

Polygonum barbatum Linn.
Common, flowering, Dhoni R. F., *J. Joseph* 17169.

P. plebeium R. Br.
Common, flowering and fruiting, Walayar forest, *J. Joseph* 17121.

ARISTOLOCHIACEAE

Apama siliquosa Lamk.
Common, flower buds, Dhoni R. F., *E. Vajravelu* 19079.

Aristolochia indica Linn.
Common, flowering, Sappal hill-Dhoni R. F., *J. Joseph* 17845.

PIPERACEAE

Peperomia pellucida (Linn.) H.B.K.
Common, flowering, Dhoni R. F., *J. Joseph* 17199.
Piper attenuatum Buch.-Ham.

Common, flowering, Sappal hill-Dhoni R. F., *J. Joseph* 17190.

P. longum Linn.
Common, flowering, Sappal hill-Dhoni R. F., *J. Joseph* 17825.

LORANTHACEAE

Helicanthes elastica (Desv.) Dans.
Common, flowering, Olavakkot, *J. Joseph* 17774.
Scurrula parasitica Linn.

Common, flowering, Sappal hill-Dhoni R. F., *J. Joseph* 17827.

Viscum articulatum Burm.
Common, flowering and fruiting, Sappal hill-Dhoni R. F., *J. Joseph* 17830.

SANTALACEAE

Santalum album Linn.
Common, flowering, Dhoni R. F., *J. Joseph* 17184.

EUPHORBIACEAE

Acalypha alnifolia Klein ex Willd.
Common, flowering and fruiting, Malampuzha hill slopes, *J. Joseph* 17796.

A. racemosa Wall. ex Baill.
Common, flowering, Walayar forest, *J. Joseph* 17057.

Antidesma diandrum (Roxb.) Roth
Common, flowering and fruiting, Dhoni R. F., *J. Joseph* 17194.

Breynia retusa (Dennst.) Alston
Common, fruiting, Malampuzha, *J. Joseph* 17139.

B. rhamnoides Muell.-Arg.
Common, flowering, Dhoni R. F., *E. Vajravelu* 19093.

Bridelia retusa Spr.
Common, fruiting, Walayar Forest, *J. Joseph* 17892.

Chrozophora rottleri (Geis.) Juss. ex Spr.
Common, flowering and fruiting, Walayar river bed, *E. Vajravelu* 19017.

Cleidion spiciflorum (Burm. f.) Merr.
Common, fruiting, Dhoni R. F., *E. Vajravelu* 19087.

Cleistanthus collinus Benth.
Common, fruiting, Walayar forest, *J. Joseph* 17045.

Croton bonplandianum Baill.
Very common, flowering and fruiting, Walayar Dam, *J. Joseph* 17087.

Emblica officinalis Gaertn.
Common, fruiting, Sappal hill-Dhoni R. F., *J. Joseph* 17823.

Euphorbia hirta Linn.
Very common, flowering and fruiting, Walayar Dam, *J. Joseph* 17091.

E. prostrata Ait.
Common, flowering and fruiting, Olavakkot, *E. Vajravelu* 19151.

E. thymifolia Linn.
Very common, flowering and fruiting, Malampuzha canal, *E. Vajravelu* 19123.

Homonoia riparia Lour.
Abundant, flowering, Dhoni R. F., *E. Vajravelu* 19103. Fruiting, *J. Joseph* 17177.

Jatropha curcas Linn.
Common, flowering and fruiting, Walayar canal, *E. Vajravelu* 19066.

Jatropha gossypifolia Linn.

Common, flowering, Walayar *J. Joseph* 17108.

Kirganelia reticulata (Poir.) Baill.

Very common, flowering and fruiting, Olavakkot, *J. Joseph* 17713.

Mallotus philippensis (Lamk.) Muell.-Arg.

Common, flowering, Dhoni R. F., *J. Joseph* 17188.
Fruiting, Malampuzha, *E. Vajravelu* 19124.

Phyllanthus asperulatus Hutch.

Common, flowering and fruiting, Dhoni R. F., *J. Joseph* 17173.

P. maderaspatensis Linn.

Common, flowering and fruiting, Walayar Dam, *J. Joseph* 17095.

P. rheedii Wt.

Common, flowering, Malampuzha, *J. Joseph* 17137.

P. simplex Retz.

Common, flowering, Walayar Dam, *J. Joseph* 17076.

P. urinaria Linn.

Common, flowering and fruiting, Malampuzha, *J. Joseph* 17152.

Ricinus communis Linn.

Common-cultivated, flowering, Walayar Dam, *E. Vajravelu* 19060.

Sauropus quadrangularis Muell.-Arg.

Common, flowering, Dhoni R. F., *J. Joseph* 17234.

Sebastiania chamaelea Muell.-Arg.

Common, flowering, Malampuzha, *J. Joseph* 17132.

Securinega virosa (Roxb.) Pax & Hoffm.

Common, flowering and fruiting, Malampuzha hill slopes, *E. Vajravelu* 19109.

Trewia polycarpa Benth.

Common, fruiting, Dhoni R. F., *E. Vajravelu* 19090.

ULMACEAE

Holoptelea integrifolia (Roxb.) Planch.

Common, fruiting, Walayar forest, *E. Vajravelu* 19054.

Trema orientalis (Linn.) Bl.

Common, flowering, Dhoni R. F., *E. Vajravelu* 19101.

MORACEAE

Ficus asperima Roxb.

Common, in receptacles, Sappal hill-Dhoni R. F., *E. Vajravelu* 19095.

F. hispida Linn. f.

Common, in receptacles, Dhoni R. F., *J. Joseph* 17200.

F. nervosa Heyne in Roth

Common, in receptacles, Sappal hill-Dhoni R. F., *E. Vajravelu* 19097.

F. racemosa Linn.

Common, in receptacles, Dhoni R. F., *E. Vajravelu* 19081.

URTICACEAE

Broussonetia papyrifera Linn.

Rare, flowering, Dhoni R. F., *J. Joseph* 17209.

Girardinia zeylanica Decne.

Common, flowering, Olavakkot, *J. Joseph* 17752.

Pouzolzia auriculata Wt.

Common, flowering, Walayar forest, *J. Joseph* 17050.

P. wightii Benn.

Common, flowering and fruiting, Sappal hill-Dhoni R. F., *J. Joseph* 17834.

CASUARINACEAE

Casuarina equisetifolia J. R. & G. Forster

Common, fruiting, Malampuzha Dam, *E. Vajravelu* 19069.

HYDROCHARITACEAE

Ottelia alismoides (Linn.) Pers.

Common, flowering, Walayar canal, *E. Vajravelu* 19069.

ORCHIDACEAE

Acampe praemorsa (Roxb.) Blatter & McCann

Very common, flowering and fruiting, Walayar forest, *E. Vajravelu* 19042.

Aerides maculosum Lindl.

Common, fruiting, Walayar forest, *J. Joseph* 17896.

Habenaria digitata Lindl.

Common, flowering, Dhoni R. F., *J. Joseph* 17174.

H. furcifera Lindl. var. **affinis** Wt.

Rare, flowering, Sappal hill-Dhoni R. F., *J. Joseph* 17808.

H. plantaginea Lindl.

Common, flowering, Sappal hill-Dhoni R. F., *J. Joseph* 17809.

ZINGIBERACEAE

Costus speciosus (Koen. ex Retz.) Smith

Very common, flowering, Sappal hill-Dhoni R. F., *J. Joseph* 17839.

Curcuma pseudomontana Grah.

Very common, flowering, Walayar forest, *J. Joseph* 17017.

Globba ophioglossa Wt.Common, flowering, Dhoni R. F., *J. Joseph* 17185.**Zingiber roseum** Bosc.Common, flowering, Dhoni R. F., *J. Joseph* 17211.

HYPOXIDACEAE

Curculigo orchoides Gaertn.Common, flowering, Walayar forest, *J. Joseph* 17018.

DIOSCOREACEAE

Dioscorea hispida Dennst.Common, flowering, Erulankadu-Malampuzha Dam, *J. Joseph* 17161, 17162.

LILIACEAE

Gloriosa superba Linn.Common, flowering, Olavakkot, *J. Joseph* 17771.**Scilla hyacinthina** (Roth) Macbr.Common, flowering, Walayar forest, *J. Joseph* 17118.

PONTEDERIACEAE

Eichhornia crassipes Solms.Very common, flowering, Kalpathy river-Olavakkot, *E. Vajravelu* 19146.**Monochoria vaginalis** (Burm. f.) Presl ex KunthVery common, flowering, Walayar river bed, *E. Vajravelu* 19024.

COMMELINACEAE

Amischophacelus axillaris (Linn.) Rolla Rao & KammathyCommon, flowering, Olavakkot, *J. Joseph* 17704.**Aneilema montanum** Wt.Common, flowering and fruiting, Sappal hill-Dhoni R. F., *J. Joseph* 17814.**Commelina benghalensis** Linn.Common, flowering, Olavakkot, *J. Joseph* 17707.**C. undulata** R. Br.Common, flowering, Walayar forest, *J. Joseph* 17111.**C. wightii** Rolla RaoCommon, flowering, Olavakkot, *J. Joseph* 17720.**Cyanotis cristata** (Linn.) Schult. f.Common, flowering, Olavakkot, *J. Joseph* 17725.**C. papilionacea** Schult. f.Common, flowering, Malampuzha hill slopes, *J. Joseph* 17799.**Murdannia semiteres** (Dalz.) Sant.Common, flowering, Malampuzha hill slopes, *J. Joseph* 17798.**M. spirata** (Linn.) BrucknerCommon, flowering and fruiting, Olavakkot, *J. Joseph* 17748.

TYPHACEAE

Typha angustata Bory & Chaub.Very abundant, flowering, Walayar Dam canal, *J. Joseph* 17106.

ARACEAE

Ariopsis peltata NimmoCommon, flowering, Dhoni R. F., *J. Joseph* 17222.**Colocasia esculenta** (Linn.) SchottCommon, flowering, Olavakkot, *J. Joseph* 17751.**Pothos scandens** Linn.Common, flowering, Sappal hill-Dhoni R. F., *J. Joseph* 17843.**Therophonum indicum** Engl.Common, flowering, Walayar forest, *J. Joseph* 17016.

LEMNACEAE

Lemna paucicostata Heg.Common in stagnant pools, Dhoni R. F., *J. Joseph* 17844.**Spirodela polyrrhiza** (Linn.) SchleidCommon in still waters, Walayar river bed, *E. Vajravelu* 19027.

ERIOCAULACEAE

Eriocaulon cinereum R. Br.Common, flowering, Olavakkot, *J. Joseph* 17786.**E. quinquangulare** Linn.Common, flowering, Dhoni R. F., *J. Joseph* 17861.**E. truncatum** Ham.Common, flowering, Malampuzha canal, *E. Vajravelu* 19120.

CYPERACEAE

Bulbostylis barbata (Rottb.) Cl.Common, flowering, Malampuzha, *J. Joseph* 17142.**Cyperus aristatus** Rottb.Common, flowering, Malampuzha, *J. Joseph* 17135.**C. diffusus** Vahl var. **macrostachyus** Boeck.Common, flowering, Walayar Dam, *J. Joseph* 17824.**C. exaltatus** Retz.Common, flowering, Walayar forest, *E. Vajravelu* 19050.**C. kyllingia** Endl.Common, flowering, Walayar forest, *J. Joseph* 17041.**C. laevigatus** Linn.Common, flowering, Walayar river bed, *E. Vajravelu* 19026.

Cyperus pygmaeus Rottb.

Common, flowering, Walayar forest, *J. Joseph* 17902.

C. rotundus Linn.

Very common, flowering, Walayar Dam, *J. Joseph* 17100.

C. tenuispica Steud.

Common, flowering, Olavakkot, *J. Joseph* 17715.

C. triceps (Rottb.) Endl.

Common, flowering, Walayar forest, *J. Joseph* 17904.

C. uncinatus Poir.

Common, flowering, Malampuzha hill slopes, *J. Joseph* 17155.

Fimbristylis acuminata Vahl

Common, flowering, Malampuzha hill slopes, *E. Vajravelu* 19141.

F. dipsacea Benth.

Common, flowering, Malampuzha hill slopes, *E. Vajravelu* 19110.

F. miliacea Vahl

Common, flowering, Malampuzha canal, *E. Vajravelu* 19137.

F. tenera Roem. & Schult.

Very common, flowering, Malampuzha, *J. Joseph* 17156.

Lipocarpa chinensis (Osé.) Kern

Common, flowering, Malampuzha, *E. Vajravelu* 19134.

Mariscus compactus Druce

Common, flowering and fruiting, Walayar forest, *E. Vajravelu* 19051.

M. dubius Kuk.

Common, flowering, Walayar forest, *J. Joseph* 17024.

Pycnus odoratus Urb.

Common, flowering, Walayar Dam, *J. Joseph* 17876.

P. stramineus Cl.

Common, flowering, Olavakkot, *J. Joseph* 17717.

Scirpus supinus Linn.

Common, flowering, Malampuzha, *E. Vajravelu* 19139.

GRAMINEAE

Aristida depressa Retz.

Common, flowering, Walayar Dam, *J. Joseph* 17103.

Arundinella mesophylla Nees ex Steud.

Common, flowering, Dhoni R. F., *J. Joseph* 17846.

Chrysopogon aciculatus (Retz.) Trin.

Common, flowering, Walayar Dam, *J. Joseph* 17104.

C. orientalis (Desv.) A. Camus

Common, flowering, Walayar forest, *J. Joseph* 17899.

Cynodon dactylon (Linn.) Pers.

Very common, flowering, Walayar, *J. Joseph* 17916.

Dichanthium annulatum (Forsk.) Stapf

Very common, flowering, Walayar Dam, *J. Joseph* 17101.

Digitaria adscendens (H. B. K.) Henr.

Common, flowering, Walayar, *J. Joseph* 17914.

D. griffithii (Hook. f.) Henr.

Common, flowering, Dhoni R. F., *J. Joseph* 17227.

Eragrostis pilosa (Linn.) Beauv.

Common, flowering, Malampuzha hill slopes, *E. Vajravelu* 19126.

E. unioloides (Retz.) Nees ex Steud.

Common, flowering, Olavakkot, *J. Joseph* 17716.

Heteropogon contortus (Linn.) Beauv. ex Roem. et Schult.

Common, flowering, Walayar, *J. Joseph* 17898.

Hygroryza aristata (Retz.) Nees ex Wt. & Arn.

Common, flowering, Olavakkot, *J. Joseph* 17784.

Isachne dispar Trin.

Common, flowering, Walayar forest, *J. Joseph* 17908.

Iseilema antheophoroides Hack.

Common, flowering, Walayar Dam, *J. Joseph* 17105.

Leptochloa chinensis (Linn.) Nees

Common, flowering, Walayar river bed, *E. Vajravelu* 19025.

Paspalum scrobiculatum Linn.

Common, flowering and fruiting, Dhoni R. F., *E. Vajravelu* 19102.

Pennisetum polystachyon (Linn.) Schult.

Common, flowering, Walayar Dam, *J. Joseph* 17878.

Pseudoraphis spinescens (R. Br.) Vickery

Common, flowering, Dhoni R. F., *J. Joseph* 17862.

Saccharum spontaneum Linn.

Common, flowering, Walayar Dam, *J. Joseph* 17877.

Sacciolepis indica (Linn.) A. Chase

Common, flowering, Malampuzha, *E. Vajravelu* 19135.

S. interrupta (Willd.) Stapf

Common, flowering, Olavakkot, *J. Joseph* 17782.

Setaria tomentosa (Roxb.) KunthCommon, flowering, Walayar, *J. Joseph* 17913.**Themeda triandra** Forsk.Common, flowering, Walayar forest, *J. Joseph* 17897.**Tripogon bromoides** Roem. et Schult.Common, flowering, Dhoni R. F., *J. Joseph* 17860.**Urochloa panicoides** Beauv.Common, flowering, Walayar Dam, *J. Joseph* 17102.

PTERIDOPHYTES

OPHIOGLOSSACEAE

Ophioglossum costatum R. Br.Common, fertile, Malampuzha, *J. Joseph* 17153.

SCHIZAEACEAE

Lygodium flexuosum (Linn.) Sw.Rare, fertile, Erulankadu-Malampuzha Dam, *J. Joseph* 17166.

PTERIDACEAE

Actinopteris dichotoma (Forsk.) Kuhn.Common, fertile, Walayar forest, *J. Joseph* 17032.**Adiantum caudatum** Linn.Common, fertile, Walayar forest, *E. Vajravelu* 19046.**A. philippense** Linn.Very common, fertile, Dhoni R. F., *J. Joseph* 17219.**Cheilanthes mysorensis** Wall. ex Hook.Common, fertile, Walayar forest, *J. Joseph* 17895.**C. tenuifolia** (Burm.) Sw.Common, fertile, Malampuzha, *J. Joseph* 17133.**Pityrogramma calomelanos** (Linn.) Link.Common, fertile, Dhoni R. F., *E. Vajravelu* 19080.**Pteris quadriaurita** Retz.Common, fertile, Walayar forest, *E. Vajravelu* 19052.**P. vittata** Linn.Common, fertile, Walayar canal, *E. Vajravelu* 19067.

PARKERIACEAE

Ceratopteris thalictroides (Linn.) Brongn.Very common, fertile, Olavakkot, *J. Joseph* 17772.
Walayar river bed, *E. Vajravelu* 19023.

ASPIDIACEAE

Athyrium hohenackerianum (Ktze.) MooreCommon fertile, Dhoni R. F., *J. Joseph* 17221.**Cyclosorus extensus** (Bl.) ChingCommon, fertile, Walayar forest, *E. Vajravelu* 19049.

POLYPODIACEAE

Drynaria quercifolia (Linn.) J. SmithVery abundant, fertile, Olavakkot, *E. Vajravelu* 19143.**Pyrrosia adnascens** (Sw.) ChingCommon, fertile, Dhoni R. F., *E. Vajravelu* 19088.

MARSILEACEAE

Marsilea minuta Linn.Very common, fertile, Walayar river bed, *E. Vajravelu* 19028.

ACKNOWLEDGEMENT

The authors are very grateful to late Dr. K. M. Sebastine, Regional Botanist, Botanical Survey of India, Coimbatore for his kind help and encouragement during the course of this study.

REFERENCES

- BOR, N. L. *The Grasses of Burma, Ceylon, India and Pakistan*. London, 1960.
- CHANDRASEKHARAN, C. A general note on the vegetation of Kerala State. *Indian For.* 88 (6) : 440 and 441, 1962.
- Ecological study of the forests of Kerala State. *Ibid.* 88 (7) : 473-480, 1962.
- Forest types of Kerala State ... (1). *Ibid.* 88 (9) : 660-674, 1962.
- Forest types of Kerala State ... (2). *Ibid.* 88 (10) : 731-747, 1962.
- Forest types of Kerala State ... (3). *Ibid.* 88 (11) : 837-847, 1962.
- RAIZADA, M. B. Name changes in common Indian Plants. *Indian For.* 84 (8) : 467-538, 1958.
- Nomenclatural changes in Indian Plants. *Ibid.* 92 (5) : 299-339, 1966.
- SANTAPAU, H. The Flora of Khandala on the Western Ghats of India. *Rec. bot. Surv. India* 16 (1), ed. 3 : 1-372, 1967.